

ART 34 AMDT

What is claimed is:

1.(Amended) A spatial light modulator for use in hologram recording, in which a plurality of light modulation elements are arranged in one plane, wherein:

5 said plurality of light modulation elements are arranged such that there are at least two periods of periodic structure corresponding to an arrangement of the light modulation elements in an arbitrary direction in said plane.

2.(Amended) A spatial light modulator for use in hologram recording, in which a plurality of light modulation elements are arranged in a light modulation region of a circular shape, wherein:

15 said plurality of light modulation elements are arranged such that there are at least two periods of periodic structure corresponding to an arrangement of the light modulation elements in an arbitrary direction in said light modulation region, and sizes of the light modulation elements increases along an outer peripheral direction of said light modulation region.

20 3.(Amended) The spatial light modulator according to claim 2, wherein said plurality of light modulation elements have areas such that the ratios of light powers incident on the respective light modulation elements fall within a predetermined range.

25 4.(Amended) A spatial light modulator for use in hologram recording and having a light modulation region of a circular shape, comprising:

light modulation elements arranged in areas which are obtained by radially and concentrically dividing said light modulation region.

5. The spatial light modulator according to claim 4, wherein
5 said light modulation elements are arranged such that there are at least two periods of periodic structure corresponding to an arrangement of the light modulation elements in a radial direction of said light modulation region.

6.(Amended) The spatial light modulator according to claim 4,
10 wherein said plurality of light modulation elements have areas such that the ratios of light powers incident on the respective light modulation elements fall within a predetermined range.